### APPENDIX D

## **MULTIPLE SPORTS COMPLEXES**

### D-1. Combination basketball-volleyball court complex (see fig D-1)

- a. Source of information. Basketball: National Collegiate Athletic Association (NCAA); Volleyball: United States Volleyball Association (USVBA).
- b. Recommended area. Ground space is 0.2 acres (9,120 square feet) for 1 basketball and 1 volleyball courts.
  - c. Size and dimensions. Overall length is 114 feet. Overall width is 80 feet.
- d. Orientation. Preferred orientation is north-south for the long axis of the court expected to have primary use.
  - e. Surface and drainage.
    - (1) Surface will be concrete or bituminous material. Protective colorcoating is optional.
- (2) Drainage is to be end to end, side to side or corner to corner diagonally at a minimum slope of 1 inch in 10 feet (0.8 percent).
- f. Special considerations. Removal post with flush-mounted deck plate must be used for the center volleyball net post to allow unobstructed use of the basketball court.

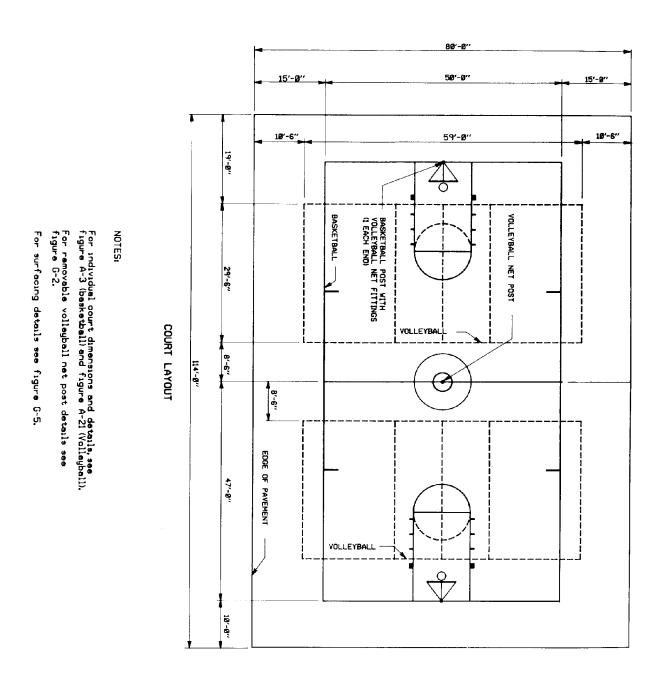
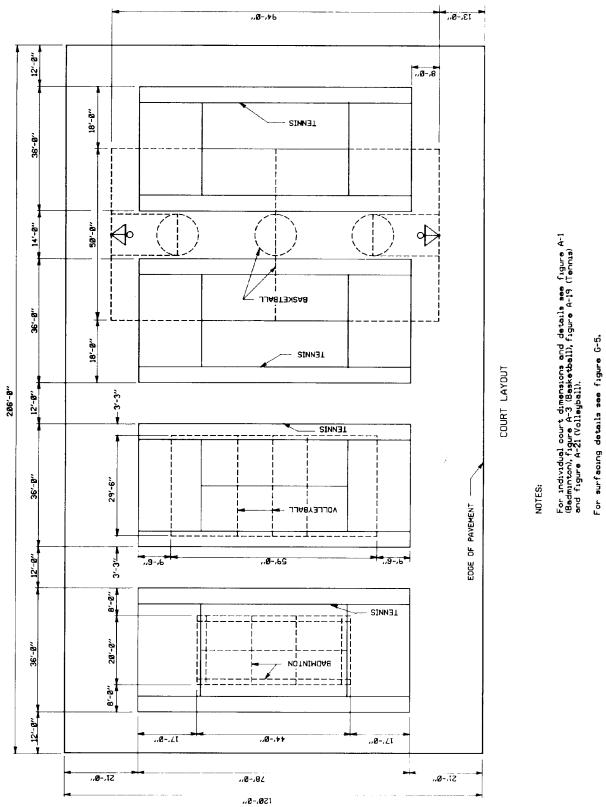


Figure D-1. Combination basketball-volleyball court complex.

# D-2. Combination tennis, volleyball, basketball, badminton court complex (see fig D-2).

- a. Source of information. Basketball: National Collegiate Athletic Association (NCAA); Volleyball: United States Volleyball Association (USVBA); Badminton: United States Badminton Association (USBA); Tennis: United States Tennis Association (USTA).
- b. Recommended area. Ground space is 24,720 square feet (0.6 acres) for four tennis courts with one basketball, one volleyball and one badminton court superimposed thereon.
  - c. Size and dimension. Overall length is 206 feet 0 inch. Overall width is 120 feet 0 inch.
  - d. Orientation. Preferred orientation is north-south for the long axis of all courts.
  - e. Surface and drainage.
    - (1) Surface is to be concrete or bituminous material. Protective colorcoating is optional.
- (2) Drainage is to be end to end, side to side or corner to corner diagonally at a minimum slope of 1 inch in 10 feet (0.8 percent).
  - f. Special considerations.
- (1) Special provisions must be made to allow the various net posts to be erected for different court games.
  - (2) Fencing will be provided 10 feet 0 inch on all sides.



 ${\it Figure~D-2.~Combination~tennis,~volleyball,~basketball,~badminton~court~complex.}$ 

### D-3. Multiple sports court (see fig D-3)

- a. Source of information. Basketball: National Collegiate Athletic Association (NCAA): Volleyball: United States Volleyball Association (USVBA); Tennis: United States Tennis Association (USTA); Shuffleboard: General Sportcraft.
  - b. Recommended area. Ground space is 9,840 square feet (0.2 acre).
  - c. Size and dimension. Overall length is 120 feet 0 inch. Overall width is 82 feet 0 inch.
- d. Orientation. Preferred orientation is north-south for the long axis of the court expected to have primary use.
  - e. Surface and drainage.
- (1) Surface is to be concrete or bituminous material. Protective colorcoating is optional. Shuffleboard courts must be concrete.
- (2) Preferred drainage is from end to end at a slope of 1 inch in 10 feet (0.8 percent). The 12 feet 0 inch areas on each end will be level for the shuffleboard courts.
  - f. Special considerations.
- (1) Removable posts with flush-mounted deck plates must be used for tennis and volleyball to allow unobstructed use of other courts.
  - (2) Fencing will be provided 10 feet 0 inch high on all sides.

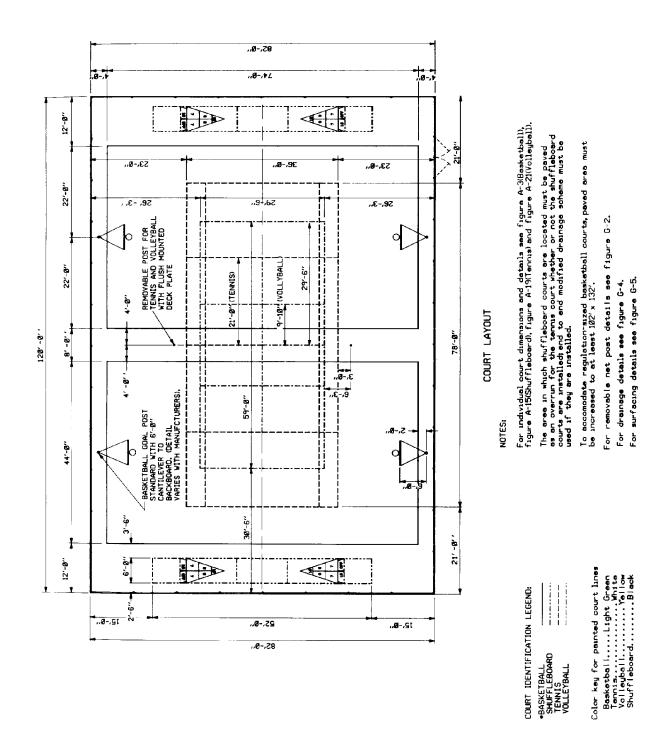
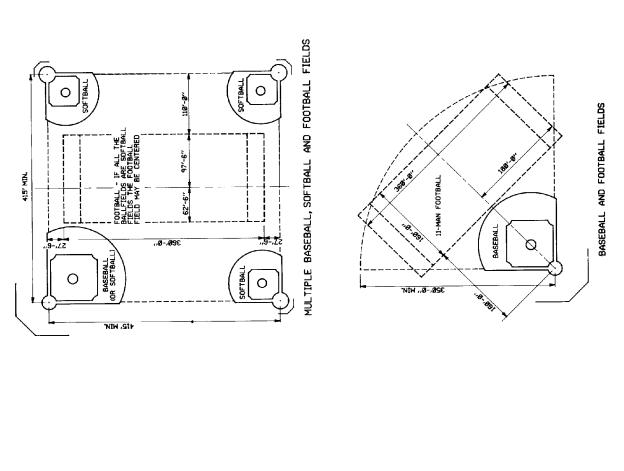


Figure D-3. Multiple sports court.

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# D-4. Combination sports fields (see fig D-4)

- a. Source of information. Baseball: The Official Playing Rules Committee, Official Baseball Rules; Softball: Amateur Softball Association of America (ASA); Touch and Flag Football: National Touch and Flag Football Rules, The Athletic Institute. Football, 11 man: National Collegiate Athletic Association (NCAA).
  - b. Recommended area. Varies with number of fields and configuration.
  - c. Size and dimension. Varies with number of fields and configuration.
- d. Orientation. Preferred orientation varies when combinations are used. Selection for priority should be based on anticipated use, time of play, and local site conditions.
  - e. Surface and drainage.
    - (1) Surface is to be turf.
    - (2) Drainage is to be provided following guidelines for individual sports.
- f. Special considerations. Safety aspects of each sport will not be compromised when multi-use concepts are employed.



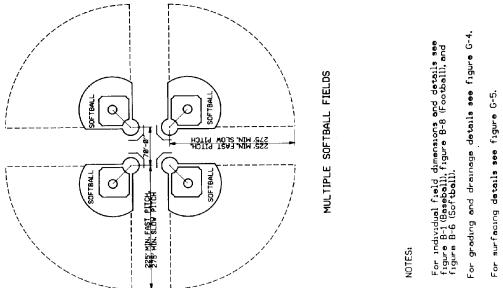


Figure D-4. Combination sports fields.

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# D-5. Sports fields within running tracks (see fig D-5)

- a. Source of information. Football: National Collegiate Athletic Association (NCAA); Soccer: United States Soccer Federation (USSF).
  - b. Recommended area. Ground space is approximately 4.1 acres.
- c. Size and dimensions. See figures C-1 and C-2 for track details. See figures B-8 and B-9 for football field details and figures B-12 and B-13 for soccer field details. Overall length is 600 feet. Overall width is 276 feet.
  - d. Orientation. See paragraph C-id for orientation details.
  - e. Surface and drainage.
- (1) Surfaces will be in accordance with the provisions as stated in appendix C for the particular sports field.
- (2) Drainage. Details for drainage may be obtained from the NCAA. See figures C-I and C-2 for 400 m track grading and drainage.
- f. Special considerations. Special considerations will be those stated for the particular sport or event as stated in appendix C.

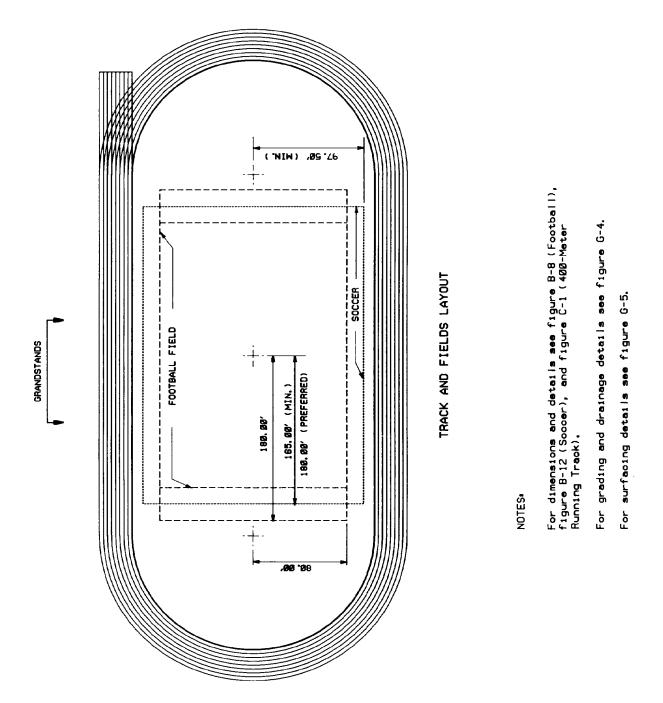
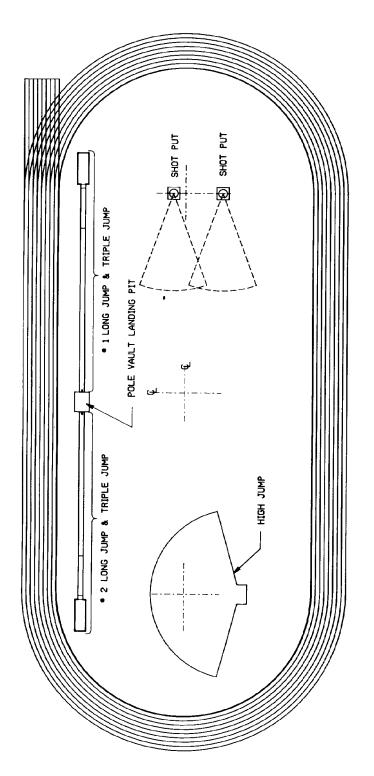


Figure D-5. Sports fields within running tracks.

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# D-6. Multiple field events within running tracks (see fig D-6)

- a. Source of information. National Collegiate Athletic Association (NCAA).
- b. Recommended area. Ground space is approximately 4.1 acres.
- c. Size and dimensions. See figures C-1 and C-2 for track details. See figure C-3 for shot put, figure C-7 for long jump and triple jump, figure C-8 for pole vault, and figure C-9 for high jump.
  - d. Orientation. See paragraph C-id for orientation details.
  - e. Surface and drainage.
- (1) Surface will be in accordance with the provisions as stated in appendix C for the particular event.
  - (2) Drainage. Details for drainage may be obtained from the NCAA.
- f. Special considerations. Special considerations will be those stated for the particular sport or event as stated in appendix C.



# TRACK AND FIELD EVENTS LAYOUT

OTES

Discus, hammer, and javelin throwing areas shall be located outside of track for safety.

Pole vault landing pit may have to be removed to provide minimum runway length when \*2 long jump and triple jump area is used.

See figures C-1, C-2, C-3, C-7, C-8, and C-9 for details and layout data for individual events. Grading and drainage information and other data can be ordered from NCAA.

 $Figure \ D\hbox{--}6. \ \textit{Multiple field events within running tracks}.$